

Patent Abstracts of Japan

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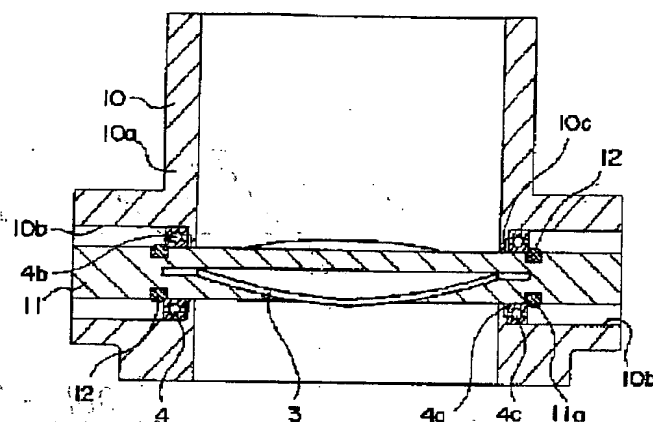
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TITLE : AIR FLOW CONTROLLER FOR
INTERNAL COMBUSTION ENGINE



ABSTRACT : PROBLEM TO BE SOLVED: To prevent lowering of retention force of an intake pipe wall to a bearing, to prevent deformation of the intake pipe wall, and to improve assembling workability of the bearing to the intake pipe.

SOLUTION: An air flow controller for an internal combustion engine comprises an intake pipe 10 made of a synthetic resin, a throttle valve shaft 11 penetrating both through holes 10b formed in a wall 10a of the intake pipe 10 orthogonal to an axial direction of the intake pipe 10, a throttle valve 3 which is fixed to the throttle valve shaft 11 and adjusts an air flow rate in the intake pipe 10 by rotation of the throttle valve shaft 11, ball bearings 4 which are provided in the through holes 10b and rotatably bear the throttle valve shaft 11, and elastic bodies 12 which are provided outside the ball bearings 4 in the through holes 10b and press the ball bearings 4 in a radial inside direction of the intake pipe 10. Each the elastic body 12 is locked in a groove part 11a annularly formed around an outer circumference of the throttle valve shaft 11.

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